

REMARKS

New and Amended Claims

Independent method Claims 1, 8, 12 and 20 have been amended consistent with the original preambles. New claims 23-28 have been added. Support for new claims 23-28 is found, inter alia, at page 5, lines 19-24, in Fig. 3, and original claims 12 and 15-19. Claims 1-28 are presented for further examination.

Claim of Priority

The comment regarding the claim of priority is in error. Priority is not claimed for this application.

Rejection under 103(a)

The rejection of claims 1-22 under 35 U.S.C. § 103(a) over Enachescu et al. (US 6,840,666) in view of Nanri et al. (US 6,024,904) is respectfully traversed.

Enachescu relates to a method for finding defects (including shorts and opens (see col. 2, lines 9-10)) of pixels of liquid crystal display (LCD) panels (see col. 1, lines 34-36). Each pixel forms a circuit (see Fig. 2 of Enachescu), and the defects of such pixel may be caused by various factors besides shorts and opens (see col. 2, lines 22-26 of Enachescu). In other words, Enachescu relates to an inspection of each pixel (a circuit) by infrared thermography to see if each pixel as a whole is a good one or defective one. This inspection does not necessarily mean an inspection of disconnections in the conductive wire pattern of an LCD panel. In other words, a defective pixel does not necessarily have a conductive wire disconnection, i.e., Enachescu does not differentiate between conductive wire disconnection defects and other defects in the pixels.

Nanri is cited for allegedly disclosing an antifogging conductive wire pattern, and the rejection asserts that it would have been obvious to combine Enachescu and Nanri. As described above, however, Enachescu discloses determining defects in pixels as a whole, rather than defects specifically in conductive wires. Therefore, even if one were to combine Enachescu and Nanri,

the combination still would not teach all of the limitations of the independent claims of the present application. Accordingly, independent claims 1, 8, 12, and 20, as well as their respective dependent claims, are allowable.

Moreover, in light of Enachescu's disclosure of detecting defects in pixels as a whole, rather than in the conductive wires, it would not have been obvious to one of ordinary skill in the art to use the Enachescu device and method on the antifogging conductive wire pattern of Nanri to detect defects in the wire pattern. Therefore, claims 1-22 are allowable over the prior art.

New claims 23-28 also are unobvious over the combination of Enachescu and Nanri. According to claim 23, only the rectangular portion (e.g., element 10 in Fig. 3) of the temperature distribution image is subjected to a binarization by an image processor. This partial binarization allows much faster image processing than a full binarization of the temperature distribution image. Even if there is a conductive wire disconnection outside of the rectangular portion 10 in Fig. 3, it is clear that such disconnection can surely be detected since the rectangular portion has a size to cover a portion of each conductive wire, as shown in Fig. 3. Binarization of only the rectangular portion of the temperature distribution image, as claimed in claim 23, is not disclosed or suggested by Enachescu (see col. 10, lines 44-47). In other words, if a partial binarization were conducted in Enachescu, the inspection itself would become defective in Enachescu. In contrast, the binarization of only the rectangular portion of the temperature distribution image is totally effective in the claimed invention, since the conductive wires are parallel with each other as shown in Fig. 3 and since the rectangular portion has a size to cover a portion of each conductive wire as shown in Fig. 3. Thus, new claims 23-28 defined unobvious subject matter.


If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned at (202) 624-2845 would be appreciated since this should expedite the prosecution of the application for all concerned.

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If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #038788.52620US).

Respectfully submitted,

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